



Civil Engineering Professionals ANZSCO 2332-11,12,14,15

Western Australia
April 2019

Current labour market rating: No shortage

Surveyed employers throughout the state attracted (on average) multiple suitable applicants and filled a majority of their vacancies.

Key research findings

- Surveyed employers included a range of medium and large businesses operating in mining and construction throughout metropolitan and regional WA, as well as a number of local governments.
 - Those in the metropolitan area attracted an average of 2.9 suitable applicants per vacancy and filled 75 per cent of their roles.
 - Employers in regional areas attracted an average of 2.5 suitable applicants and filled 100 per cent of their vacancies.
- Employers sought civil engineering professionals for a range of roles including traffic and transport engineering, structural engineering, civil engineering and geotechnical engineering.
- All employers sought applicants with a civil engineering qualification and (with the exception of vacancies for graduates) experience in the branch of civil engineering relevant to their specific vacancy. Applicants were also expected to be proficient in relevant software such as AutoCAD, Revit, Space Glass and RAPT.
- Separate to technical expertise, applicants were required (to varying degrees) to manage people, contract and projects. As such, these vacancies sought applicants with well-developed communication and negotiation skills, an ability to work effectively in a team and a minimal need for supervision.
 - Vacancies for senior roles required applicants to have prior experience in a senior role and highly developed people management and time management skills.

2019 Survey Results¹



80%
of vacancies
filled



20.9
Applicants per
vacancy



15.2
Qualified
applicants
per vacancy



2.8
Suitable
applicants per
vacancy

- Almost three quarters of applicants were qualified, and of these applicants, employers deemed 84 per cent unsuitable.
- The main reason qualified applicants were deemed unsuitable was a lack of experience relevant to the role.
 - This included a lack of experience in fields such as traffic and transport engineering, land development, structural design, project work, sector specific experience (such as oil and gas) or commercial construction.

Demand and supply

- Data show the most recent period of significant growth in vacancies for civil engineering professionals occurred over 2011 to 2012, this was following by a period of decline. While vacancy numbers have increased by over 20 per cent over the 12 months to March 2019, they remain well below the peak level in 2012.
- Over the five years to 2016, there was an average of 274 undergraduate and postgraduate degrees in civil engineering completed each year in Western Australia. Data for 2017 show 313 undergraduate and postgraduate completions in this field.

¹ The methodology underpinning this research is outlined at [Skill Shortage Research Methodology](#)

Additional Data Sources: Department of Employment, Skills, Small and Family Business, Internet Vacancy Index, March 2019; Department of Education, Higher Education Student Data Collection, 2017, customised tables.